Using Loop Constructs - 0

Which of the following statement is correct about below code?

```
public class Test {
     public static void main(String[] args) {
         do {
             System.out.println(100);
         } while (false);
         System.out.println("Bye");
     }
}
```

A - Compiles successfully and prints “Bye”

B - Compiles successfully and prints 100 in infinite loop

C - Unreachable code compilation error

D - 100 Bye

Using Loop Constructs - 1

What will be the result of compiling and executing Test class?

```
public class Test {
     public static void main(String[] args) {
         int [] arr = {2, 1, 0};
         for(int i : arr) {
             System.out.println(arr[i]);
         }
     }
}
```

A - 0 1 2

B - 2 1 0

C - ArrayIndexOutOfBoundsException is thrown at runtime

D - Compilation error

Using Loop Constructs - 2

What will be the result of compiling and executing Test class?

```
public class Test {
     public static void main(String[] args) {
         int [] arr = {3, 2, 1};
         for(int i : arr) {
             System.out.println(arr[i]);
         }
     }
}
```

A - 3 2 1

B - Compilation error

C - ArrayIndexOutOfBoundsException is thrown at runtime

D - 1 2 3

Using Loop Constructs - 3

What will be the result of compiling and executing Test class?

```
public class Test {
     public static void main(String[] args) {
         int x = 5;
         while (x < 10)
             System.out.println(x);
             x++;
     }
}
```

A - 5 6 7 8 9

B - It will go in an infinite loop

C - Compilation error

D - Produces no output

Using Loop Constructs - 4

Consider given code:

```
public class Test {
     public static void main(String[] args) {
         String [][] fruits = {{"apple", "mango"}, {"orange",
        "grape"}};
         /*INSERT*/
     }
}
```

For the class Test, which options, if used to replace /*INSERT*/, will print “apple mango orange grape” on to the console?

Select ALL that apply.

A -

```
for(int i = 1; i <= fruits.length; i++)
  for(int j = 1; j <= fruits[i].length ; j++)
    System.out.print(fruits[i][j] + " ");
```

B -

```
for(int i = 0; i < fruits.length; i++)
  for(int j = 0; j < fruits[i].length ; j++)
    System.out.print(fruits[i][j] + " ");
```

C -

```
for(String [] arr : fruits)
  for(String fruit : arr)
    System.out.print(fruit + " ");
```

D -

```
for(int i = 1; i < fruits.length; i++)
  for(int j = 1; j < fruits[i].length ; j++)
    System.out.print(fruits[i][j] + " ");
```

Using Loop Constructs - 5

Which of the following statement is correct for below code?

```
public class Test {
     public static void main(String[] args) {
         final boolean flag = false;
         while(flag) {
             System.out.println("Good Morning!");
         }
     }
}
```

A - Compilation error

B - It will print “Good Morning!” once

C - Program compiles and executes successfully but produces no output

D - Infinite loop

Using Loop Constructs - 6

What will be the result of compiling and executing Test class?

```
public class Test {
     public static void main(String[] args) {
         int start = 1;
         int sum = 0;
         do {
             if(start % 2 == 0) {
                 continue;
             }
             sum += start;
         } while(++start <= 10);
         System.out.println(sum);
     }
}
```

A - 25

B - 24

C - Compilation error

D - 55

Using Loop Constructs - 7

What will be the result of compiling and executing Test class?

```
public class Test {
     public static void main(String[] args) {
         for(int i=0; i<=2; i++){}
         System.out.println(i);
     }
}
```

A - Compilation error

B - 2

C - 3

D - 0

Using Loop Constructs - 8

What will be the result of compiling and executing Test class?

```
public class Test {
     public static void main(String[] args) {
         for:
         for (int i = 2; i <= 100; i = i + 2) {
             for(int j = 1; j <= 10; j++) {
                 System.out.print(i * j + "\t");
             }
             System.out.println();
             if(i == 10) {
                 break for;
             }
         }
     }
}
```

A - Compilation error

B - Total 50 rows will be there in the output

C - Total 100 rows will be there in the output

D - Total 5 rows will be there in the output

Using Loop Constructs - 9

Which of the following statement is correct for below code?

```
public class Test {
     public static void main(String[] args) {
         final boolean flag;
         flag = false;
         while(flag) {
             System.out.println("Good Morning!");
         }
     }
}
```

A - It will print “Good Morning!” once.

B - Infinite loop.

C - Compilation error.

D - Program compiles and executes successfully but produces no output.

Using Loop Constructs - 10

What will be the result of compiling and executing Test class?

```
public class Test {
     public static void main(String[] args) {
         int i;
         for(i=0; i<=2; i++){}
         System.out.println(i);
     }
}
```

A - 2

B - 3

C - Compilation error

D - 0

Using Loop Constructs - 11

What will be the result of compiling and executing Test class?

```
public class Test {
     public static void main(String[] args) {
         int i;
         outer:
         do {
             i = 5;
             inner:
             while (true) {
                 System.out.println(i--);
                 if (i == 4) {
                     break outer;
                 }
             }
         } while (true);
     }
}
```

A - Compilation error.

B - Prints 5 once.

C - Prints 5 in an infinite loop.

D - 5 3 2 1

Using Loop Constructs - 12

Which of the following statement is correct about below code?

```
public class Test {
     public static void main(String[] args) {
         do {
             System.out.println(100);
         } while (true);

         System.out.println("Bye");
     }
}
```

A - Compiles successfully and prints “Bye”

B - Compiles successfully and prints 100 in infinite loop

C - Unreachable code compilation error

D - 100 Bye

Using Loop Constructs - 13

Consider below code of Test.java file:

```
public class Test {
    public static void main(String[] args) {
        String [][] arr = { {"%", "$$"}, {"***", "@@@@",
        "#######"}};
        for(String [] str : arr) {
            for(String s : str) {
                System.out.println(s);
                if(s.length() == 4) //Line n1
                    break; //Line n2
            }
            break; //Line n3
        }
    }
}
```

What will be the result of compiling and executing Test class?

A -

```
%
$$
***
@@@@
```

B -

```
%
$$
```

C -

```
%
$$
***
```

D -

```
%
```

E -

```
%
$$
***
@@@@
#######
```

Using Loop Constructs - 14

Consider below code of Test.java file:

```
public class Test {
    public static void main(String[] args) {
        boolean flag = false;
        do {
            if(flag = !flag) { //Line n1
                System.out.print(1); //Line n2
                continue; //Line n3
            }
            System.out.print(2); //Line n4
        } while(flag); //Line n5
    }
}
```

What will be the result of compiling and executing Test class?

A - 1

B - 121

C - 212

D - 21

E - Compilation error

F - 221

G - 12

H - 112

Using Loop Constructs - 15

Consider below code of Test.java file:

```
public class Test {
    public static void main(String[] args) {
        int i = 1;
        int j = 5;
        int k = 0;
        A: while(true) {
            i++;
            B: while(true) {
                j--;
                C: while(true) {
                    k += i + j;
                    if(i == j)
                        break A;
                    else if (i > j)
                        continue A;
                    else
                        continue B;
                }
            }
        }
        System.out.println(k);
    }
}
```

What will be the result of compiling and executing Test class?

A - 15

B - Compilation error

C - 6

D - 11

E - Program never terminates as above code causes infinite loop

F - None of the other options

Using Loop Constructs - 16

Consider below code of Test.java file:

```
public class Test {
    public static void main(String[] args) {
        int i = 0;
        for(System.out.print(i++); i < 2; System.out.print(i++)) {
            System.out.print(i);
        }
    }
}
```

What will be the result of compiling and executing Test class?

A - Compilation error

B - 012

C - 011

D - 12

E - 01

F - 112

Using Loop Constructs - 17

Consider below code of Test.java file:

```
public class Test {
    public static void main(String[] args) {
        int ctr = 100;
        one: for (int i = 0; i < 10; i++) {
            two: for (int j = 0; j < 7; j++) {
                three: while (true) {
                    ctr++;
                    if (i > j) {
                        break one;
                    } else if (i == j) {
                        break two;
                    } else {
                        break three;
                    }
                }
            }
        }
        System.out.println(ctr);
    }
}
```

What will be the result of compiling and executing Test class?

A - 106

B - 105

C - 101

D - 102

E - 100

F - 103

G - Compilation error

H - 104

Using Loop Constructs - 18

Consider below code of Test.java file:

```
public class Test {
    public static void main(String[] args) {
        int elements = 0;
        Object [] arr = {"A", "E", "I", new Object(), "O", "U"};
        //Line n1
        for(Object obj : arr) { //Line n2
            if(obj instanceof String) {
                continue;
            } else {
                break;
            }
            elements++; //Line n3
        }
        System.out.println(elements); //Line n4
    }
}
```

What will be the result of compiling and executing Test class?

A - Compilation error at Line n3

B - 5

C - Compilation error at Line n4

D - Compilation error at Line n2

E - 1

F - 3

G - 6

H - Compilation error at Line n1

Using Loop Constructs - 19

Consider below code of Test.java file:

```
public class Test {
    public static void main(String[] args) {
        outer: for(int i = 0; i < 3; System.out.print(i)) {
            i++;
            inner: for(int j = 0; j < 3; System.out.print(j)) {
                if(i > ++j) {
                    break outer;
                }
            }
        }
    }
}
```

What will be the result of compiling and executing Test class?

A - Program terminates successfully but nothing is printed on to the console

B - Program terminates successfully after printing 123 on to the console

C - Program terminates successfully after printing 1231 on to the console

D - Compilation error

E - Program terminates successfully after printing 121 on to the console

F - Program terminates successfully after printing 1 on to the console

G - Program terminates successfully after printing 0120 on to the console

H - Program terminates successfully after printing 12 on to the console

Using Loop Constructs - 20

Consider below code of Test.java file:

```
public class Test {
    public static void main(String[] args) {
        for(int x = 10, y = 11, z = 12; y > x && z > y; y++, z -= 2)
        {
            System.out.println(x + y + z);
        }
    }
}
```

What will be the result of compiling and executing Test class?

A - Compilation error

B - 33

C - 33 32

D - 32

E - 34